AMENDMENTS TO THE CLAIMS:

The following listing of claims supersedes all prior versions and listings of claims in this application:

LISTING OF CLAIMS:

1. (Currently Amended) An interactive dialogue apparatus comprising:

at least one input port;

two or more output ports, wherein said output ports are respectively arranged to output prompts of different types;

~~means for processing input responses to determine the semantic meaning thereof;~~

~~control means for determining, on the basis of a user preference value, a suitable type of output prompt to be output from at least one of said output ports in response to a received input response; and~~

a first store storing input and output type data indicative of one or more properties of the input and output ports and/or the input responses and output prompts communicated therethrough;

wherein said input and output type data is updated when: i) any of said one or more properties change; and/or ii) output prompts are sent; and/or iii) input responses are received;

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wherein one of said properties is the utilization made by a user of each input and output port; [[and]]

means for establishing from said properties for each of said input and output ports [[the]] a user preference value,

means for processing input responses to determine the semantic meaning thereof; and

control means for determining, on the basis of the user preference value, a suitable type of output prompt to be output from at least one of said output ports in response to a received input response.

2. (Currently Amended) An interactive dialogue apparatus comprising:

two or more input ports, wherein said input ports are respectively arranged to receive input responses of different types;

at least one output port;

means for processing input responses received at one or more of said input ports to determine the semantic meaning thereof;

control means for determining, on the basis of a user preference value, a suitable type of output prompt to be output from said output port in response to a received input response; and

a first store storing input and output type data indicative of one or more properties of the input and output ports and/or the input responses and output prompts communicated therethrough;

wherein said input and output type data is updated when: i) any of said one or more properties change; and/or ii) output prompts are sent; and/or iii) input responses are received;

wherein one of said properties is the utilization made by a user of each input and output port; [[and]]

means for establishing from said properties for each of said input and output ports [[the]] a user preference value.

means for processing input responses received at one or more of said input ports to determine the semantic meaning thereof; and

control means for determining, on the basis of the user preference value, a suitable type of output prompt to be output from said output port in response to a received input response.

3. (Previously Presented) An apparatus according to claim 2, further comprising:

at least one additional output port,

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wherein said control means is further arranged to determine a suitable output prompt to be output from at least one of said output ports in response to a received input response; and

wherein said output ports are respectively arranged to output output prompts of different types.

4. (Previously Presented) An apparatus according to claim 1, wherein:

for any particular received input prompt, output prompts which are semantically synonymous or which mutually contribute towards a single semantic message independent of type are output from two or more of the output ports.

5. (Previously Presented) An apparatus according to claim 1, wherein each input or output port is adapted to connect to one or more input or output devices via respective device gateways.

6. (Cancelled)

7. (Previously Presented) An apparatus according to claim 1, wherein one of said properties is the connection of appropriate input or output devices to each of said input or output ports.

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8. (Previously Presented) An apparatus according to according to claim 1, wherein one of said properties is user preference value for each of said input and output ports.

9. (Previously Presented) An apparatus according to according to claim 1, wherein one of said properties is device property data of input or output devices connected to said input or output ports.

10. (Previously Presented) An apparatus according to according to claim 1, wherein:

one of said properties is implementation data indicative of: whether an output prompt has been implemented in each output prompt type and/or input parse rules for each input response type.

11. (Previously Presented) An apparatus according to claim 1, wherein one of said properties is type-supported data indicative of whether the apparatus is capable of receiving and/or outputting input responses and/or output prompts of each type.

12. (Cancelled)

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13. (Previously Presented) An apparatus according to claim 1, wherein the update of said data comprises instantiating new data structures to store the values of said changed properties, and storing said previous data to give a historical record of said data.

14. (Previously Presented) An apparatus according to claim 1, wherein said input and output type data further includes timing data indicative of the timings of changes in said one or more properties.

15. (Previously Presented) An apparatus according to claim 1, wherein said input and output type data comprises a single data entry for each input and output type, the value taken by a particular data entry being dependent on previous values of any one or more of that or other data entries.

16. (Previously Presented) An apparatus according to claim 1, further comprising:

a second store data defining a dialogue to be held with a user, and dialogue progression conditions which must be met to allow a user to progress through the

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dialogue, at least some of said conditions involving the stored input and output type data.

17. (Previously Presented) An apparatus according to claim 1, further comprising:

a second store storing data defining a dialogue model comprising an initial state, a plurality of subsequent states, possible transitions between said states, and for each transition at least one associated condition to be satisfied before that transition is deemed allowable, at least some of said conditions involving the stored input and output type data.

18. (Previously Presented) An apparatus according to claim 16, wherein the second store comprises a plurality of distributed storage media.

19. (Previously Presented) An apparatus according to claim 1, further comprising:

port control means for controlling the connections of input or output devices to said input or output ports in response to the stored input and output type data.

20. (Previously Presented) An apparatus according to claim 1, further comprising:

means for generating output prompts, said means being operable to generate output prompts adapted for particular output ports in dependence on the stored input and output type data.

21. (Previously Presented) An apparatus according to claim 1, wherein said first store comprises a plurality of distributed storage media each logically interconnected.

22. (Previously Presented) An apparatus according to claim 1, wherein the different types of output prompts or input responses comprise audio prompts or responses, or visual prompts or responses, or motor prompts or responses, in any combination thereof.

23. (Currently Amended) A machine-implemented interactive dialogue method comprising using at least one programmed computer having a CPU, memory and input/output ports to:

receive input responses at least one input port;

~~process the input responses to determine the semantic meaning thereof;~~

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~~determine, on the basis of a user preference value, a suitable output prompt to be output from at least one of two or more output ports in response to a received input response, wherein said output ports are respectively arranged to output output prompts of different types; and~~

store input and output data indicative of one or more properties of the input and output ports and/or the input responses and output prompts communicated therethrough;

wherein said input and output type data is updated when: i) any of said one or more properties change; and/or ii) output prompts are sent; and/or iii) input responses are received;

wherein one of said properties is the utilization made by a user of each input and output port; [[and]]

~~establishing~~ <u>establish</u> from said properties for each of said input and output ports [[the]] <u>a</u> user preference value<u>,</u>

<u>process the input responses to determine the semantic meaning thereof; and</u>

<u>determine, on the basis of the user preference value, a suitable output prompt to be output from at least one of two or more output ports in response to a received input response, wherein said output ports are respectively arranged to output output prompts of different types.</u>

24. (Currently Amended) An interactive dialogue method comprising using at least one programmed computer having a CPU, memory and input/output ports to:

receive input responses <u>at</u> one or more input ports, wherein said input ports are respectively arranged to receive input responses of different types;

~~the input responses received at one or more of said input ports to determine the semantic meaning thereof;~~

~~determine, on the basis of a user preference value, a suitable output prompt to be output from an output port in response to a received input response, wherein said input ports are respectively arranged to receive input responses of different types; and~~

store input and output data indicative of one or more properties of the input and output ports and/or the input responses and output prompts communicated therethrough,

wherein said input and output type data is updated when: i) any of said one or more properties change; and/or ii) output prompts are sent; and/or iii) input responses are received;

wherein one of said properties is the utilization made by a user of each input and output port; [[and]]

~~establishing~~ <u>establish</u> from said properties for each of said input and output ports [[the]] <u>a</u> user preference value<u>.</u>

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process the input responses received at one or more of said input ports to determine the semantic meaning thereof; and

determine, on the basis of the user preference value, a suitable output prompt to be output from an output port in response to a received input response, wherein said input ports are respectively arranged to receive input responses of different types.

25. (Previously Presented) A method according to claim 24, wherein said determining step determines a suitable output prompt to be output from at least one of a plurality of output ports in response to a received input response; and wherein said output ports are respectively arranged to output output prompts of different types.

26. (Previously Presented) A method according to claim 23, wherein for any particular received input prompt, output prompts which are semantically synonymous or which mutually contribute towards a single semantic message independent of type are output from two or more of the output ports.

27. (Previously Presented) A method according to claim 23, further comprising:
connecting any one or more of the input or output ports to one or more input or output devices via respective device gateways.

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28. (Cancelled)

29. (Previously Presented) A method according to claim 23, wherein one of said properties is the connection of appropriate input or output devices to each of said input or output ports.

30. (Previously Presented) A method according to claim 23, wherein one of said properties is a user preference value for each of said input and output ports.

31. (Previously Presented) A method according to claim 23, wherein one of said properties is device property data of input or output devices connected to said input or output ports.

32. (Previously Presented) A method according to claim 23, wherein one of said properties is implementation data indicative of whether an output prompt has been implemented in each output prompt type.

33. (Previously Presented) A method according to claim 23, wherein one of said properties is type-supported data indicative of whether the apparatus is capable of receiving and/or outputting input responses and/or output prompts of each type.

34. (Cancelled)

35. (Previously Presented) A method according to claim 23, wherein the update of said data comprises instantiating new data structures to store the values of said changed properties, and storing said previous data to give a historical record of said data.

36. (Previously Presented) A method according to claim 23, wherein said input and output type data further includes timing data indicative of the timings of changes in said one or more properties.

37. (Previously Presented) A method according to claim 23, wherein:

said input and output type data comprises a single data entry for each input and output type, the value taken by a particular data entry being dependent on previous values of any one or more of that or other data entries.

38. (Previously Presented) A method according to claim 23, further comprising:

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storing data defining a dialogue to be held with a user, and dialogue progression conditions which must be met to allow a user to progress through the dialogue, at least some of said conditions involving the stored input and output type data.

39. (Previously Presented) A method according to claim 23, further comprising:

storing data defining a dialogue model comprising an initial state, a plurality of subsequent states, possible transitions between said states, and for each transition at least one associated condition to be satisfied before that transition is deemed allowable, at least some of said conditions involving the stored input and output type data.

40. (Previously Presented) A method according to claim 38, wherein said data defining the dialogue model is stored on a plurality of storage media each of which is logically interconnected.

41. (Previously Presented) A method according to claim 23, further comprising:

controlling the connections of input or output devices to said input or output ports in response to the stored input and output type data.

42. (Previously Presented) A method according to claim 23, further comprising:

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generating output prompts adapted for particular output ports in dependence on the stored input and output type data.

43. (Previously Presented) A method according to claim 23, wherein said input and output type data is stored on a plurality of distributed storage media.

44. (Previously Presented) A method according to claim 23, wherein the different types of output prompts or input responses comprise audio output prompts or input responses, or visual output prompts or input responses, or motor outer prompts or input responses, in any combination thereof.

45. (Previously Presented) A computer storage medium containing a computer program or suite of programs arranged such that when executed on a computer the program or programs cause the computer to perform an interactive dialogue method according to claim 23.

46. (Previously Presented) A computer storage medium containing a computer program or suite of programs arranged such that when loaded into a computer it or they renders the computer an apparatus according to claim 1.

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47. (Cancelled)

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